AGC/WSDOT Structures Team Minutes
March 25, 2005
Members in Attendance

Attendees:	Company	Phone	E-mail
Casey, Daniel	KLM Const.	253-297-2750	dcasey@klmci.com
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Kapur, Jugesh	WSDOT_HQ	360-705-7209	kapurju@wsdot.wa.gov
Leachman, Dan	Kiewit Const.	425-255-8333	dLeachman@kiewit-PBD.com
Madden, Tom	WSDOT-UCO	206-768-5861	maddent@wsdot.wa.gov
Olson, Ryan	Mowat Const.	425-398-0205	ryan.olson@mowatco.com
Owings, Don	WSDOT-SWR	360-905-1501	owingsd@wsdot.wa.gov
Parrish, Kevin	Hamilton Const.	541-746-2416	kparrish@hamil.com
Schettler, Jim	Jacobs Civil	206-382-6322	Jim.schettler@jocobs.com
Schmidt, Virgil	WSDOT-HQ	360-705-7825	schmidv@wsdot.wa.gov
Sheikhizadeh, M.	WSDOT-HQ	360-705-7828	sheikhm@wsdot.wa.gov
Smith, Tobin	Max J. Kuney	509-535-0651	tobin@maxkuney.com
Swenson, Robb	General Const.	360-394-1407	Robb.Swenson@kiewit.com

Others in attendance
Chris Dean Wilder Construction 425-551-3100 chrisdea@wilderconstruction.com
Jacob zacharda Wilder Construction
Jack Ecklund Quigg Bros. 360-533-1530

The meeting began at 9:00 AM. February Meeting minutes were reviewed and approved with the following corrections that Millard Barney and Ryan Olson's email addresses were incorrect.

Also added the distance specification to curing boxes of 30 yards distance from any vibration as in ASTM T-22 or 23.

New Vibration Limits Spec- Test Results

Jim Schettler handed out the new proposed specification entitled, "Protection Against Vibration".
Some comments on the handout were that highway traffic adjacent to or on the structure is exempt from this specification.
Also, deck placements and concrete deck placements equipment should be exempt from this specification.
Jackhammers smaller than 90 lbs. are also exempt.

Note 1 on the handout is revised by, "… to 10 feet for small rubber tired construction equipment, construction equipment like rubber tired construction equipment like backhoes …"

Note 2 on the handout is revised by adding the weight of a D8 cat and striking the D8 cat from the specification.
On the second page change the minimum compressive strength to 2000 psi instead of 2500, strike the redundant compressive strength and change class 5000 to 4000.

Action Plan: Jim will make the above changes to the draft Spec and e-mail a copy to Mo for dissemination to all members in a week.

Pile Driving Tolerances-Std. Specs. 6-05.3(11)A

Virgil handed out a revised version of this Spec. along with a clarifying drawing to further show the intent of this Spec. After further discussion the last sentence of the first paragraph will be added to the second paragraph.

The tolerance for the variation in slope will be change to ½ inch in 12 inches instead of 4 percent. The note on the drawing will also be changed that showed the last 10 feet to, "Last 10 Feet to Drive Before Cutoff."

Action Item: Virgil will make further revisions to this Spec and discuss at the next meeting.

Special Provisions "Removing Portions of Existing Bridge"

This item was deferred to the next meeting because of limited time.

Results of Parametric Study, Straight vs. Sloped Back Face For Tall Retaining Walls Type 1

Jugesh handed out a sheet that showed a study done by the bridge office assuming a straight back wall face a constant width over the entire wall height vs. the 1 in 10 batter called out in the standard plans, for a 10 foot wall height the additional concrete and steel will cost $54.66 per foot, for 20 foot wall $245.70 per foot of wall, and for a 30 foot wall $488.40 per foot of wall.
The Bridge Office is currently updating the standard plans for the current LRFD design code. The new plans will show either a straight back face or a battered back face but not both options.

Action Item: Kevin Parrish and Chris Dean will price the cost of building a retaining wall at the heights shown in Jugesh's handout with both a battered face and a vertical face so the cost difference can be evaluated.

Bridge Deck Curing

Mo discussed this topic briefly and said WSDOT had seen a lot of deck cracking on the concrete placed in new bridges last year. He wanted the committee to discuss how we could eliminate this problem through better curing, different concrete mix or a

combination of both. Mo handed out an item on high performance concrete that talked about fogging; he also said that two of the cement suppliers, LaFarge and Lehigh, are doing shrinkage tests on the class 4000 D. Mo talked about a possible specification to limit the differential temperature between deck concrete and its supporting structure during deck placement to limit this temperature differential to no more than 22 degrees.

Action Plan: Continuing discussions for the next meeting

Construction Progress of the Skyway Bridge in the Bay Area (Rob Swenson)

Rob Swanson of PKS-General Construction talked about his work in the Bay Area on the Skyway Bridge, Rob has been mostly involved in the substructure work, but his presentation covered all phases of the work including super structure. Some of the highlights:

- Original cost of slightly over $1 billion
- Substructure founded on piles 8 ½" diam., up to 3" thick driven with double King Kong 80' –100' into the Bay mud
- Sophisticated pile template was manufactured in Texas and shipped to the site at a cost of $1 Million each
- It took 48 hrs – 60 hrs to make the full pen pile welded connection
- High volume air bubble curtain was used
- Pre-cast trapezoidal concrete box sections were match cast near the construction site weighing 800 Tons each.

9. Deck Finishing

This topic was deferred to the next meeting due to lack of time.

Next meeting: **April 22nd**

The meeting adjourned at noon.